

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

1

13

Complete if Known

Application Number 09/009,837

Filing Date 01/20/1998

First Named Inventor Mills

Group Art Unit 1754 [795]

Examiner Name Tsang KA LAM T

Attorney Docket Number

--	--	--	--

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.*	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	58	R. L. Mills, "Classical Quantum Mechanics," Physics Essays, Vol. 16, No. 4, December, (2003), pp. 433-498. (Web Publication Date: May 23, 2002.)	
	60	R. L. Mills, J. Sankar, A. Voigt, J. He, B. Dhandapani, "Synthesis of HDLC Films from Solid Carbon," Journal of Materials Science, in press. (Web Publication Date: May 3, 2002.)	
	77	J. Phillips, R. L. Mills, X. Chen, "Water Bath Calorimetric Study of Excess Heat in Resonance Transfer Plasmas," J. Appl. Phys., Vol. 96, No. 6, (2004) 3095-3102. (Web Publication Date: June 16, 2003.)	
	80	R. L. Mills, "The Fallacy of Feynman's Argument on the Stability of the Hydrogen Atom According to Quantum Mechanics," Annales de la Fondation Louis de Broglie, submitted. (Web Publication Date: Jan. 27, 2003.)	
	81	R. Mills, P. Ray, B. Dhandapani, W. Good, P. Jansson, M. Nansteel, J. He, A. Voigt, "Spectroscopic and NMR Identification of Novel Hydride Ions in Fractional Quantum Energy States Formed by an Exothermic Reaction of Atomic Hydrogen with Certain Catalysts," European Physical Journal: Applied Physics, 28, (2004), 83-104. (Web Publication Date: Feb. 21, 2003.)	
JK	88	R. Mills, J. Sankar, A. Voigt, J. He, P. Ray, B. Dhandapani, "Role of Atomic Hydrogen Density and Energy in Low Power CVD Synthesis of Diamond Films," Thin Solid Films, 478, (2005) 77-90. (Web Publication Date: Dec. 22, 2003.)	
	94	R. L. Mills, "The Nature of the Chemical Bond Revisited and an Alternative Maxwellian Approach," Physics Essays, in press. (Web Publication Date: Aug. 6, 2003.)	
	96	J. J. Phillips, C. K. Chen, R. L. Mills, "Evidence of the Production of Hot Hydrogen Atoms in RF Plasmas by Catalytic Reactions Between Hydrogen and Oxygen Species," Spectrochimica Acta Part B: Atomic Spectroscopy, submitted. (Web Publication Date: Sept. 12, 2003.)	
	97	R. L. Mills, P. Ray, B. Dhandapani, "Evidence of an Energy Transfer Reaction Between Atomic Hydrogen and Argon II or Helium II as the Source of Excessively Hot H Atoms in RF Plasmas," Journal of Plasma Physics, in press. (Web Publication Date: Sept. 26, 2003.)	
	98	R. L. Mills, Y. Lu, J. He, M. Nansteel, P. Ray, X. Chen, A. Voigt, B. Dhandapani, "Spectral Identification of New States of Hydrogen," New Journal of Chemistry, submitted. (Web Publication Date: Nov. 18, 2003.)	

ALREADY

OF
RECORD

ALREADY

OF
RECORD

Examiner Signature	<i>DJ Kuhn</i>	Date Considered	5/2/06
--------------------	----------------	-----------------	--------

MAR 01 2006
PATENT & TRADEMARK OFFICE

PTO/SB/08B (Modified)

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

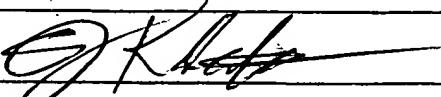
Sheet	2	13	Attorney Docket Number	
-------	---	----	------------------------	--

Complete if Known

Application Number	09/009,837
Filing Date	01/20/1998
First Named Inventor	Mills
Group Art Unit	1754 (17465)
Examiner Name	Tsang KAUFIT

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	100	R. Mills, B. Dhandapani, J. He, "Highly Stable Amorphous Silicon Hydride from a Helium Plasma Reaction," Materials Chemistry and Physics, submitted. (Web Publication Date: Nov 17, 2002.)	
	101	R. L. Mills, Y. Lu, M. Nansteel, J. He, A. Voigt, B. Dhandapani, "Energetic Catalyst-Hydrogen Plasma Reaction as a Potential New Energy Source," Division of Fuel Chemistry, Session: Chemistry of Solid, Liquid, and Gaseous Fuels, 227th American Chemical Society National Meeting, March 28-April 1, 2004, Anaheim, CA.	ALREADY OF RECORD
	102	R. L. Mills, "Exact Classical Quantum Mechanical Solutions for One- through Twenty-Electron Atoms," Phys. Essays, submitted. (Web Publication Date: April 22, 2004.)	
	103	R. L. Mills, Dhandapani, W. Good, J. He, "New States of Hydrogen Isolated from K ₂ CO ₃ Electrolysis Gases," Electrochim. Acta, submitted. (Web Publication Date: April 28, 2004.)	
	104	R. L. Mills, Y. Lu, M. Nansteel, J. He, A. Voigt, W. Good, B. Dhandapani, "Energetic Catalyst-Hydrogen Plasma Reaction as a Potential New Energy Source," Division of Fuel Chemistry, Session: Advances in Hydrogen Energy, 228th American Chemical Society National Meeting, August 22–26, 2004, Philadelphia, PA.	
OK	113	R. Mills, "Physical Solutions of the Nature of the Atom, Photon, and Their Interactions to Form Excited and Predicted Hydrino States", New Journal of Physics, submitted.	
OK	114	R. Mills, K. Akhtar, B. Dhandapani, "Tests of Features of Field-Acceleration Models for the Extraordinary Selective H Balmer α Broadening in Certain Hydrogen Mixed Plasmas," Journal of Applied Physics, submitted. (web publication June 24, 2005, www.blacklightpower.com).	

Examiner Signature		Date Considered	5/2/06
--------------------	---	-----------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute for form 1449B/PTO			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT			
(use as many sheets as necessary)			
Sheet	3	13	Attorney Docket Number

OTHER PRIOR ART – NON-PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	105	J. Phillips, C. K. Chen, R. L. Mills, "Evidence of Catalytic Production of Hot Hydrogen in RF-Generated Hydrogen/Argon Plasmas," J. Appl. Physics, submitted. (Web Publication Date: September 7, 2004.)	
	106	R. L. Mills, "Exact Classical Quantum Mechanical Solution for Atomic Helium which Predicts Conjugate Parameters from a Unique Solution for the First Time," Foundations of Science, submitted. (Web Publication Date: October 28, 2004.)	
	107	R. L. Mills, "Maxwell's Equations and QED: Which is Fact and Which is Fiction," Physica Scripta, submitted. (Web Publication Date: October 28, 2004.)	
OK	108	R. L. Mills, J. He, M. Nansteel, B. Dhandapani, "Catalysis of Atomic Hydrogen to New Hydrides as a New Power Source," International Journal of Global Energy Issues (IJGEI). Special Edition in Energy System, submitted. (Web Publication Date: April 4, 2005.)	
OK	109	R. L. Mills, M. Nansteel, J. He, B. Dhandapani, "Low-Voltage EUV and Visible Light Source Due to Catalysis of Atomic Hydrogen," J. Plasma Physics, submitted. (Web Publication Date: April 15, 2005.)	
OK	110	R. L. Mills, J. He, Z. Chang, W. Good, Y. Lu, B. Dhandapani, "Catalysis of Atomic Hydrogen to Novel Hydrides as a New Power Source," Prepr. Pap.—Am. Chem. Soc., Div. Fuel Chem. 2005, 50(2). (Web Publication Date: April 22, 2005.)	
OK	111	R. L. Mills, J. He, Z. Chang, W. Good, Y. Lu, B. Dhandapani, "Catalysis of Atomic Hydrogen to Novel Hydrogen Species H ^{1/4} and H ₂ (1/4) as a New Power Source," Thermochemical submitted. (Web Publication Date: May 6, 2005.)	
OK	112	R. L. Mills, J. He, Y. Lu, Z. Chang, B. Dhandapani, "Comprehensive Identification and Potential Applications of New States of Hydrogen," Central European Journal of Physics, submitted. (Web Publication Date: May 9, 2005.)	

Examiner Signature		Date Considered	5/2/06
--------------------	---	-----------------	--------

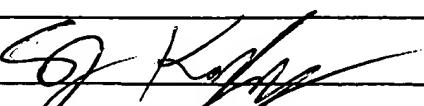
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

A copy of
Record

Substitute for form 1449B/PTO				Complete if Known	
				Application Number	09/009,837
				Filing Date	01/20/1998
				First Named Inventor	Mills
				Group Art Unit	4754 1795
				Examiner Name	Isang KOLAGT
Sheet	4	of	13	Attorney Docket Number	9113-23US

OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
SK		CRITCHLEY et al., "Energy shifts and forbidden transitions in H ₂ due to electronic g/u symmetry breaking", <i>Molecular Physics</i> , 2003, Vol. 101, Nos. 4-5, pp. 651-661, Taylor & Francis Ltd.	(No Month)		
OK		GAMBUS et al., "Spectroscopic Study of Low-Pressure Water Plasmas and Their Reactions with Liquid Hydrocarbons", <i>Energy & Fuels</i> , 2002, 16, pp. 172-176, American Chemical Society	(No Month)		
OK		CVETANOVIC et al., "Excessive Balmer line broadening in a plane cathode abnormal glow discharge in hydrogen", <i>Journal of Applied Physics</i> , 97, 033302 (2005), American Institute of Physics	(No Month)		
OK		AKATSUKA et al., "Stationary population inversion of hydrogen in an arc-heated magnetically trapped expanding hydrogen-helium plasma jet", <i>Physical Review E</i> , 49, 2, pp. 1534-1544, February, 1994, The American Physical Society			
OK		MURAKAMI et al., "Chemisorption of hydrogen into a graphite-potassium intercalation compound C ₆ K studied by means of positron annihilation", <i>J. Chem. Phys.</i> , 62 (10), May 15, 1995, American Institute of Physics			
OK		AHN, "Hydrogen Storage in Metal-Modified Single-Walled Carbon Nanotubes", Division of Engineering and Applied Science, California Institute of Technology, September 15, 2001			
OK		DUAN et al., "Numerical calculation of energies of some excited states in a helium atom", <i>Eur. Phys. J.</i> , D 19, (2002), pp. 9-12, Societa Italiana di Fisica, Springer-Verlag 2002	(No Month)		
OK		NIXON et al., "Formation and structure of the potassium graphites", <i>Brit. J. Appl. Phys.</i> , Ser. 2, Vol., 1, pp. 291-299, Great Britain, 2002	(No Month)		
OK		ZELLINGER, "Experiment and the foundations of quantum physics", <i>Reviews of Modern Physics</i> , Vol 71, No. 2, pp. S288-S297, Centenary 1999, The American Physical Society	(No Month)		

Examiner Signature		Date Considered	5/2/06
--------------------	---	-----------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

<p>Substitute for form 1449B/PTO</p> <p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</p> <p>(use as many sheets as necessary)</p>				Complete if Known	
				Application Number	09/009,837
				Filing Date	01/20/1998
				First Named Inventor	Mills
				Group Art Unit	1754 → 1745
Examiner Name	Tsang KALI PUT				
Sheet	5	of	12	Attorney Docket Number	9113-23US

OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
OK		COTTON et al., "Complexes of Cyclic 2-Oxacarbenes, I. A Spontaneous Cyclization to Form a Complex of 2-Oxacyclopentylidene", <i>Journal of the American Chemical Society</i> , 93:11, pp. 2672-2676, June 2, 1971			
OK		LINDSAY et al., "A remeasurement of the 2.4μm spectrum of J = H ₂ pairs in a parahydrogen crystal", <i>Journal of Molecular Spectroscopy</i> , 218, Pp. 131-133, 2003		(No Month)	
OK		JUAREZ et al., "Photoelectron angular distributions of rotationally resolved states in para-H ₂ ⁺ : A closer to the dynamics of molecular photoionisation", The University of Manchester Atomic, Molecular & Laser Manipulation Group, pp.1-5		(No Date)	
OK		WEISSSTEIN, "Ortho-Para Hydrogen", http://scienceworld.wolfram.com/physics/Ortho-ParaHydrogen.html		(No Month)	
OK		SMITH, "Infrared spectra of BO ₂ ⁻ in the alkali halides-L. Potassium and rubidium halides", <i>Spectrochimica Acta</i> , Vol. 30A, pp. 875-882, Pergamon Press, 1974		(No Month)	
OK		LEITCH et al., "Raman Spectroscopy of Hydrogen Molecules in Crystalline Silicon", <i>Physical Review Letters</i> , 81:2, pp. 421-424, July 13, 1998, The American Physical Society			
OK		CHEN et al., "Key to Understanding Interstitial H ₂ in Si", <i>Physical Review Letters</i> , 88:10, pp. 105507-1 - 105507-4, March 11, 2002, The American Physical Society			
OK		CHEN et al., "Rotation of Molecular Hydrogen in Si: Unambiguous Identification of Ortho-H ₂ and Para-D ₂ ", <i>Physical Review Letters</i> , 88:24, pp. 245503-1 - 245503-4, June 17, 2002, The American Physical Society			
OK		LAVROV et al., "Ortho and Para Interstitial H ₂ in Silicon", <i>Physical Review Letters</i> , 89:21, pp. 215501-1 - 215501-4, November 18, 2002, The American Physical Society			
OK		STAVOLA et al., "Interstitial H ₂ in Si—are all problems solved?", <i>Physica B</i> , pp. 58-66, 2006 Elsevier B.V.	(2003/No Month)		

Examiner Signature		Date Considered	5/2/06
--------------------	--	-----------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO				Complete if Known	
				Application Number	09/009,837
				Filing Date	01/20/1998
				First Named Inventor	Mills
				Group Art Unit	1754 1745
				Examiner Name	Tsang KALAFIT
Sheet	6	of	13	Attorney Docket Number	9113-23US

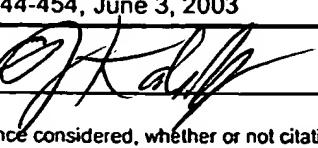
OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
(OK)		MILLS et al., "Catalysis of Atomic Hydrogen to Novel Hydrides as a New Power Source", pp. 1-8, BlackLight Power, Inc. (No DATE)			
(OK)		DECIUS et al., "Force Constants of the Metaborate Ion in Alkali Halides", <i>The Journal of Chemical Physics</i> , 56:10, pp. 5189-5190, May 15, 1972			
(OK)		"Infrared spectra of the metaborate ion in alkali halide solid solution", <i>Research Notes</i> , pp. 600-602 (No DATE)			
(OK)		SMITH, "Anharmonic force field of the metaborate ion in alkali halides", <i>The Journal of Chemical Physics</i> , 58:11, pp. 4776-4778, June 1, 1973			
(OK)		HISATSUNE et al., "Infrared Spectra of Metaborate Monomer and Trimer Ions", <i>Inorganic Chemistry</i> , pp. 168-174 (No DATE)			
(OK)		JONES et al., "Force Constants of Nickel Carbonyl from Vibrational Spectra of Isotopic Species", <i>The Journal of Chemical Physics</i> , 48:6, pp. 2663-2670, March 15, 1968			
(OK)		SMITH, "Infrared spectra of BO ₂ -in the alkali halides-I. Potassium and rubidium halides", <i>Spectrochimica Acta</i> , 30A, pp. 875-882, 1974, Pergamon Press (No Month)			
(OK)		SCHOENFELDER et al., "Kinetics of Thermal Decomposition of TiH ₂ ", <i>J. Vac. Sci. Technol.</i> , 10:5, pp. 862-870, Sept./Oct. 1973			
(OK)		"Emission Characteristics for Scandium Type Dispenser Cathodes", HeatWave Labs, Inc., TB-119, May 24, 2001, Spectra-Mat, Inc.			
(OK)		"Emission Characteristics of 'M Type' Dispenser Cathodes", HeatWave Labs, Inc., TB-117, May 24, 2001, Spectra-Mat, Inc.			
(OK)		"Practical Aspects of Modern Dispenser Cathodes", <i>Microwave Journal</i> , September, 1979			

Examiner Signature		Date Considered	5/2/06
--------------------	---	-----------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO				Complete if Known	
				Application Number	09/009,837
				Filing Date	01/20/1998
				First Named Inventor	Mills
				Group Art Unit	1754 (745)
				Examiner Name	Teang KALAFIT
Sheet	7	of	13	Attorney Docket Number	9113-23US

OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
OK		"Standard Series Barium Tungsten Dispenser Cathodes", HeatWave Labs, Inc., TB-198, July 29, 2002, Spectra-Mat, Inc.			
OK		ABATE et al., "Optimization and enhancement of H ⁺ ions in a magnetized sheet plasma", Review of Scientific Instruments, 71:10, pp. 3689-3695, October 2000, American Institute of Physics			
OK		CHABERT et al., "On the influence of the gas velocity on dissociation degree and gas temperature in a flowing microwave hydrogen discharge", Journal of Applied Physics, 84:1, pp. 161-167, July 1, 1999, American Institute of Physics			
OK		GORDON et al., "Energy coupling efficiency of a hydrogen microwave plasma reactor", Journal of Applied Physics, 89:3, pp. 1544-1549, February 1, 2001, American Institute of Physics			
OK		RADOVANOV et al., "Time-resolved Balmer-alpha emission from fast hydrogen atoms in low pressure, radio-frequency discharges in hydrogen", Appl. Phys. Lett., 66:20, pp. 2637-2639, May 15, 1995			
OK		DJUROVIC et al., "Hydrogen Balmer alpha line shapes for hydrogen-argon mixtures in a low-pressure rf discharge", J. Appl. Phys., 74:11, pp. 6558-6565, December 1, 1993, American Institute of Physics			
OK		KONJEVIC, "Plasma Broadening and Shifting of Non-Hydrogenic Spectral Lines: Present Status and Applications", Physics Reports, 315, pp. 339-401, 1999, Elsevier (No. 100)			
OK		BENESCH et al., "Line shapes of atomic hydrogen in hollow-cathode discharges", Optics Letters, 9:8, pp. 338-340, August 1984, Optical Society of America			
OK		AYERS, et al., "Shapes of atomic-hydrogen lines produced at a cathode surface", Physical Review A, 37:1, pp. 194-200, January 1, 1988, The American Physical Society			
OK		ADAMOV, et al., "Doppler Spectroscopy of Hydrogen and Deuterium Balmer Alpha Line in an Abnormal Glow Discharge", IEEE Transactions on Plasma Science, 31:3, pp. 444-454, June 3, 2003			
Examiner Signature			Date Considered	5/2/06	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO				Complete if Known	
				Application Number	09/009,837
				Filing Date	01/20/1998
				First Named Inventor	Mills
				Group Art Unit	1754 1795
				Examiner Name	Tsang, KALAFI
Sheet	8	of	13	Attorney Docket Number	9113-23US

OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		
(SK)		JOVICEVIC et al., "Excessive Balmer line broadcasting in microwave-induced discharges", <i>Journal of Applied Physics</i> , 95:1, pp. 24-29, January 1, 2004, American Institute of Physics		T ²
(SK)		DJUROVIC et al., "Hydrogen Balmer alpha line shapes for hydrogen-argon mixtures in a low-pressure rf discharge", <i>J. Appl. Phys.</i> , 74:11, pp. 6558-6565, December 1, 1993, American Institute of Physics		
(SK)		MAYO, "Thermalization and Energy Distribution in Cold Laboratory Plasmas Comments on the Possibility of Mono-Energetic Species", April 20, 2004		
(SK)		VIDENOVIC et al., "Spectroscopic investigations of a cathode fall region of the Grimm-type glow discharge", <i>Spectrochimica Acta Part B</i> , 51, pp. 1707-1731, 1996 (NP/DOANH)		
(SK)		BARBEAU et al., "Spectroscopic investigation of energetic atoms in a DC hydrogen flow discharge", pp. 1168-1174, 1990 IOP Publishing Ltd.		
(SK)		KONJEVIC et al., "Emission Spectroscopy of the Cathode Fall Region of an Analytical Glow", <i>J. Phys. IV France</i> , 7, pp. C4-247-C4-258, October 1997		
(SK)		LIFSHITZ et al., "Resonance absorption measurements of atom concentrations in reacting gas mixtures. I. Shapes of H and D Lyman-α lines from microwave sources", <i>J. Chem. Phys.</i> , 70:12, pp. 5607-5613, June 15, 1979, American Institute of Physics		
(SK)		KURAICA et al., "Line shapes of atomic hydrogen in a plane-cathode abnormal glow discharge", <i>Physical Review A</i> , 46:7, pp. 4429-4432, October 1, 1992, The American Physical Society		
(SK)		KURAICA et al., "On the Atomic Hydrogen Line Shapes in a Plane-Cathode Obstructed Glow Discharge", <i>Physica Scripta</i> , 50, pp. 487-492, 1994		

Examiner Signature	<i>S. K. Tsang</i>	Date Considered	5/2/06
--------------------	--------------------	-----------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO				Complete if Known	
				Application Number	09/009,837
				Filing Date	01/20/1998
				First Named Inventor	Mills
				Group Art Unit	1754-1745
				Examiner Name	Tsang KAC/ET
Sheet	9	of	12	Attorney Docket Number	9113-23US

OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
(SK)		OLTHOFF et al., "Studies of Ion Kinetic-Energy Distributions in the Gaseous Electronics Conference RF Reference Cell", <i>Journal of Research of the National Institute of Standards and Technology</i> , 100:4, pp. 383-400, July-August 1995			
(SK)		RADOVANOV et al., "Ion kinetic-energy distributions and Balmer-alpha (H _a) excitation in Ar-H ₂ radio-frequency discharges", <i>J. Appl. Phys.</i> , 78:2, pp. 746-756, July 15, 1995			
(SK)		DJUROVIC et al., "Hydrogen Balmer alpha line shapes for hydrogen-argon mixtures in a low-pressure rf discharge", <i>J. Appl. Phys.</i> , 74:11, pp. 6558-6565, December 1, 1993, American institute of Physics			
(SK)		ALEXEFF et al., "Collisionless Ion-Wave Propagation and the Determination of the Compressions Coefficient of Plasma Electrons", <i>Physical Review Letters</i> , 15:7, pp. 286-288, August 16, 1999			
(SK)		ARATA et al., "Reproducible 'Cold' Fusion Reaction Using a Complex Cathode", <i>Fusion Technology</i> , 22, pp. 287-295, September 1992			
(SK)		BURKHOLDER et al., "Reactions of boron atoms with molecular oxygen. Infrared spectra of BO, BO ₂ , B ₂ O ₂ , B ₂ O ₃ , and BO ₂ in solid argon", <i>J. Chem. Phys.</i> , 95:12, pp. 8697-8709, December 15, 1991			
(SK)		SPURGIN, "Direct Conversion of the Random Thermal Energy of a Plasma Into Electrical Energy", Master's Thesis, The University of South Florida, June 1972			

Examiner Signature		Date Considered	5/2/06
--------------------	---	-----------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO				<i>Complete if Known</i>	
				Application Number	09/009,837
				Filing Date	01/20/1998
				First Named Inventor	Mills
				Group Art Unit	1764 1745
				Examiner Name	Tsang KAUFU
Sheet	10	of	13	Attorney Docket Number	9113-23US

OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
<i>OK</i>		D. Luggenhölscher, U. Czarnetzki, and H.F. Dobele Institut fur Laser-und Plasmaphysik, Universitat Essen, Germany, "Investigations on Electric Field Distributions in a Microwave Discharge in Hydrogen"			(No DATE)
		Technology Insights, "Hydro Catalysis Technical Assessment," (Part of 09/009,837 paper no.: 20050207 This document was submitted by R. Mills on 7/17/02 in copending application 09/669,877).			
<i>OK</i>		Evans Analytical Group, http://www.ceas.com/inst.htm#esca2 , "Time-of-Flight Secondary Ion Mass Spectrometry "(TOF-SIMS)			(No DATE)
<i>OK</i>		J M Luque, M D Calzada and M Saez, "Experimental research into the influence of ion dynamics when measuring the electron density from the Stark broadening of the H α and H β lines."			(No DATE)
<i>OK</i>		Eng-Kie Souw, "Plasma Density Measurement in an Imperfect Microwave Cavity", J. Appl. Phys. 61, 1761, 1987.			(No Month)
<i>OK</i>		John R. Shook, "A Pragmatically Realistic Philosophy of Science", < http://www.pragmatism.org/shook/pragmatic_and_Realistic.htm >			(No DATE)
<i>OK</i>		Raoul Nakhmanson, "The Ghostly Solution of the Quantum Paradoxes and it's Experimental Verification", from "Frontiers of Fundamental Physics", Bartone & Selleri, Plenum Press, NY 1994, < http://arxiv.org/ftp/physics/papers/0103/0103006.pdf >			(No Month)
		Donald A. McQuarrie, "Quantum Chemistry", University Science Books, CA, 1983, relevant parts of Chapters 4, 6, and 8.			

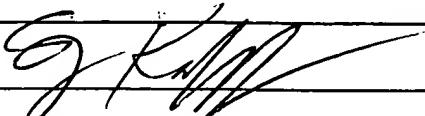
Examiner Signature	<i>S. Kau</i>	Date Considered	5/2/06
--------------------	---------------	-----------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO				Complete if Known	
				Application Number	09/009,837
				Filing Date	01/20/1998
				First Named Inventor	Mills
				Group Art Unit	1754 (795)
				Examiner Name	Tsang /CAC/AT
Sheet	11	of	12	Attorney Docket Number	9113-23US

OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
OK		E. Kovacevic, I. Stefanovic, J. Berndl, and J. Winter, "The Dynamic Response of the Plasma on the Dust Formation in Ar/C ₂ H ₂ Rf Discharges." < http://www.rcpig.uni-greifswald.de/proceedings/data/kovacevic-1 >			
OK		N. Cvetanovic, M.M. Kuraica, N. Konjevic, "Excessive Balmer Line Broadening in a Plane Cathode Abnormal Glow Discharge in Hydrogen", J. Appl. Phys. 92, 033302 (2005)			1/24/06 CITE SEE PAGE 9
OK		E. U. Condon, Ph. D., G. H. Shortley, Ph. D., "The Theory of Atomic Spectra.", Cambridge, 1967, pp.45-69, and 112-147.			(NO MONTH)
OK		Ben Best, "The Copenhagen Interpretation of Quantum Mechanics", < http://www.benbest.com/science/quantum.html >			(NO DATE)
OK		Aaron J. Barth, "Bigger Than Fire?", SKEPTIC Vol. 8, No. 4, 2001.			(NO MONTH)
OK		Notes on David Peat, "Einstein's Moon: Bell's Theorem and the Curious Quest for Quantum Reality," History and Philosophy of Science-Fall, 1997-Dr. Ess, < www.drury.edu/ess/philscl/bell.html >			(NO MONTH)
OK		Physics 200-04 Course, "Pauli Spin Matrices", < http://axion.physics.ubc.ca/200-04/paulispin.pdf >.			(NO DATE)
OK		"The Linear Stark Effect", University of Texas Lecture, < http://farside.ph.utexas.edu/teaching/qm/perturbation/node8.html >			(NO DATE)
OK		K.L. Ross, "Kantian Quantum Mechanics", < http://www.fresian.com/space-2.htm >			

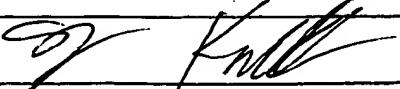
Examiner Signature		Date Considered	5/2/06
--------------------	---	-----------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO				<i>Complete if Known</i>	
				Application Number	09/009,837
				Filing Date	01/20/1998
				First Named Inventor	Mills
				Group Art Unit	1754-1795
				Examiner Name	Tsang-KALAFET
Sheet	12	of	13	Attorney Docket Number	9113-23US

OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
(OK)		Quantum Physics 301, Paradoxes and Interpretation", < http://www.teach.phy.bris.ac.uk/Level30100/CourseMaterials/paradoxes.pdf >		(No DATE)	
(OK)		The Internet Encyclopedia of Philosophy, "Logical Positivism" < http://iep.utm.edu/logpos.htm >	(No DATE)		
		H. G. Kuhn, F. R. S., "Atomic Spectra", Longmans, Green & Co., Ltd., London/Harlow 1969 (2 nd ed.).			
(OK)		Anthony J. Marchese, Ph. D., Peter Jansson, Ph. D., P.E., John I. Schmalzel, Ph. D., P.E., "The Blacklight Rocket Engine", NIAC Phase 1 Final Report (May 1-November 30, 2002). www.niac.usra.edu/files/studies/final_report/			
(OK)		"Average Molecular Kinetic Energy", < http://hyperphysics.phy-astr.gsu.edu/hbase/kinetic/molke.html >	(No DATE)		
(OK)		"Attempt to Observe Excess Heat in a Ni-H ₂ O-K ₂ CO ₃ Electrolysis System-9OCT97", www.earthtech.org/experiments/Mills/mills1.html .	(10/1997)		
(OK)		Eric Krieg, "Hydrinos: A State Below the Ground State" http://www.freenergies.org/bl/bwl/z/hydrino/hydrino.htm	(No DATE)		
(OK)		Peter D. Zimmerman, "An Analysis of Theoretical Flaws in So-Called Classical Quantum Mechanics and of Experimental Evidence Against CQM" (2001)	(NO/NOTH)		
(OK)		Rathke "A Critical Analysis of the Hydrino Model", New Journal of Physics, 19 May 2005, http://www.iop.org/ej/article/1367-2630/7/1/127/njp5_1_127.html			
		Mills, R., "Physical Solutions of the Nature of the Atom, Photon, and Their Interactions to Form Excited and Predicted Hydrino States," (web publication June 9, 2004 at www.blacklightpower.com)			

Examiner Signature		Date Considered	5/2/06
--------------------	---	-----------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.



PTO/SB/08B (Modified)

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	13		15	Attorney Docket Number	9113-23US
-------	----	--	----	------------------------	-----------

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
100	R. Mills, B. Dhandapani, J. He, "Highly Stable Amorphous Silicon Hydride from a Helium Plasma Reaction," Materials Chemistry and Physics, 94(2-3), 298-307. (Web Publication Date: Nov. 17, 2003.)				A
74	R. L. Mills, P. C. Ray, R. M. Mayo, M. Nansteel, B. Dhandapani, J. Phillips, "Spectroscopic Study of Unique Line Broadening and Inversion in Low Pressure Microwave Generated Water Plasmas," Journal of Plasma Physics, Vol. 1, Part 6, (2005), 877-888. (Web Publication Date: June 18, 2003.)				R Q A P
80	R. L. Mills, "The Fallacy of Feynman's Argument on the Stability of the Hydrogen According to Quantum Mechanics," Annales de la Fondation Louis de Broglie, Vol. 30, (2005), pp. 129-151. (Web Publication Date: Jan. 27, 2003.)				
94	R. L. Mills, "The Nature of the Chemical Bond Revisited and an Alternative Maxwellian Approach," Physics Essays, Vol. 17, (2004), 342-389. (Web Publication Date: Aug. 6, 2004.)				
96	J. Phillips, C.K. Chen, R. L. Mills, "Evidence of the Production of Hot Hydrogen Atoms in RF Plasmas by Catalytic Reactions Between Hydrogen and Oxygen Species," J. Plasma Phys., submitted. (Web Publication Date: Sept. 12, 2003.)				
Examiner Signature			Date Considered	5/2/06	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

RECORD